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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,445	12/31/2003	Bernd Lenz	460868.00019	8968
26710	7590	02/15/2006	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			JULES, FRANTZ F	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,445

Applicant(s)

LENZ, BERND

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/31/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 8-10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogilvy et al (US 3,636,508) in view of Laurent et al (US 4,442,988).

Ogilvy et al disclose a system for transmitting of information between a track and a vehicle located on the track in a model railroad system using a coil (1, 3) that exists between the vehicle and the track for the transmission of information, and detector means for detecting the information transmitted via said coil as disclosed col 1, lines 1-10 and col 3, lines 6-10.

Ogilvy et al disclose all of the features as disclosed above but does not disclose a method of transmission of information in which at least one capacitor that exists between the vehicle and the track is used. The general concept of using at least one capacitor that exists between a vehicle and a trackway for the transmission of a information between the track and the vehicle is well known in the art as illustrated by

Laurent et al which disclose the teaching of transmitting information between a track and a vehicle using existing capacitors (101, 102), see col 4, lines 7-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ogilvy et al to include the use of a method of transmission of information between the track and the vehicle comprising at least one capacitor that exists between a vehicle and a trackway in his advantageous system as

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taught by Laurent et al in order to improve on the transmission of information by limiting greatly crosstalk within a given zone as disclosed in col 1, lines 9-7-14 and 46.

5. Claims 4-7, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogilvy et al (US 3,636,508) and Laurent et al (4,442,988), as applied to claims 1 and 8, and further in view of Brown et al (US 5,485,977).

Ogilvy et al and Laurent et al teaches all the limitations of claims 4-7 except for a model railroad train comprising square wave voltage information signal and evaluating superimposed spikes from the capacitors. The general concept of providing square wave voltage information signal and evaluating superimposed spikes from the capacitors to a method of transmitting information is well known in the art as illustrated by Brown et al which discloses the teaching of square wave voltage information signal and evaluating superimposed DC voltage spikes from the capacitors in col 1, lines 9-49, col 2, lines 29-41. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ogilvy et al and Laurent et al to include the use of square wave voltage information signal and evaluating superimposed voltage spikes from the capacitors in his advantageous method of transmission of information system as taught by Brown et al in order to provide a clean sine wave which produce sufficiently reduced low harmonic-frequency spectral pollution from other noise.

Claim 13

Regarding using an AC voltage source as recited in claim 13, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ogilvy et al , Laurent et al and Brown et al to include the use an AC voltage source in his advantageous system, as input power supply source is a common and everyday

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occurrence throughout the method of transmission of information design art and the specific use of an AC voltage source would have been an obvious matter of design preference depending upon such factors as the electrical loading rating of the capacitors, the targeted speed of the train, the available energy source; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the capacitors which would most optimize the cost and performance of the system for a particular application at hand, based upon the above noted common design criteria.

Allowable Subject Matter

6. Claim 16 stand allowable.

Response to Arguments

7. Applicant's arguments filed 12/27/2005 have been fully considered but they are moot in view of the new ground of rejection.

Applicant's argument regarding Laurent et al is weak as the independent claims calls for the existence of a capacitor between the track and the vehicle. It is well known in the art that a vehicle rides on the track which itself is made of a plurality of rails. The claim invention calls for using at least one capacitor that exists between the vehicle and the track. It does not mean that the capacitor has to be positioned between the rail and the wheel of the vehicle as applicant seems to argue. Nevertheless, Laurent et al meet the limitation of a capacitor existing between the vehicle and the track. Also, the Ogilvy et al reference fully meet the limitation of an electrical structure that exists between the rail of a track and a vehicle for the transmission of information.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules
Primary Examiner
Art Unit 3617

FFJ

February 12, 2006

**FRANTZ F. JULES
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', is written over the printed name and title.